Project Report:
Achieving Value for Money
Abbotsford Regional Hospital and Cancer Centre Project

BRITISH COLUMBIA
Ministry of Health Services

partnerships

105-07044/

Auditor General
of British Columbia

February 1, 2005

Mr. Rick Mahler
Chair, Partnerships British Columbia
#1250 – 999 West Hastings Street
Vancouver, British Columbia
V6C 2W2

Dear Mr. Mahler,

My work plan for 2004 included an intention to report on the Abbotsford Regional Hospital and Cancer Centre public-private partnership project. My intent was to focus on the management practices used to ensure the project was delivered in a cost-effective manner.

During discussions on the scope of my work, I found that Partnerships British Columbia planned to produce a comprehensive report on the Abbotsford Regional Hospital and Cancer Centre project up to the finalization of the Project Agreement. The scope of my planned approach would have duplicated much of the work carried out by Partnerships British Columbia in preparing its report. Therefore, I decided that my approach would shift from a direct report where I issue a detailed report to legislators and the public—to an attestation report—where my opinion on management's written assertions would be attached to the Partnerships British Columbia report in the form of a Review Engagement Report.

My work focussed on providing a review level of assurance. That review required Partnerships British Columbia management to provide my staff with sufficient appropriate evidence to support the key assertions made in its report. I would like to acknowledge and thank Partnerships British Columbia staff for their considerable assistance in providing the detailed information and explanations requested by my staff.

I concur with the authors of the report when they caution that "the ultimate success of the project will be contingent on the successful implementation of the next stages of the project". I would also add that the ultimate success of the project will depend on effective management throughout the full term of the Project Agreement.

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When those who manage a significant government initiative report directly on their performance, the result is better accountability to legislators and the public. Including independent assurance that the reporting fairly presents the results of the initiative—as has been done for the Abbotsford Regional Hospital and Cancer Centre project—adds credibility to the reporting. I appreciate Partnerships British Columbia's willingness to engage in this leading-edge practice of having its Report reviewed by my Office. This is a step forward in improving the openness, transparency and timeliness of reporting to legislators and the public on significant government initiatives.

Yours truly,

Wayne Strelioff

Wayne Strelioff, FCA
Auditor General

Report of the Auditor General of British Columbia

To the Board of Directors of Partnerships British Columbia, and

To the Minister of Health Services;
The Minister of Finance;
The Legislative Assembly of the Province of British Columbia;

I have carried out a review to assess whether the Project Report: Achieving Value for Money: Abbotsford Regional Hospital and Cancer Centre Project prepared by Partnerships British Columbia (the Report) fairly describes the context, decisions, procurement processes and results to date of the Abbotsford Regional Hospital and Cancer Centre project.

My review was made in accordance with assurance standards recommended by the Canadian Institute of Chartered Accountants for review engagements and accordingly consisted primarily of enquiry, analytical procedures and discussions related to the information supporting the disclosures in the Report. My review was based on the criteria set out in the annex to this Review Engagement Report.

A review—which provides a moderate level of assurance—is not an audit—which provides a high, though not absolute, level of assurance. The level of assurance I can offer is based, in part, on my ability to verify information. The Report contains significant future-oriented information, which by its nature requires assumptions about future economic conditions and courses of action. Given the difficulty of obtaining sufficient, appropriate evidence to support a high level of assurance on future-oriented information, I determined that a moderate level of assurance was appropriate. Consequently, I do not express an audit opinion on the Report prepared by Partnerships British Columbia. However, I do, in the paragraph below, provide a review level of assurance.

Based on my review, nothing has come to my attention that causes me to believe that the Project Report: Achieving Value for Money: Abbotsford Regional Hospital and Cancer Centre Project does not fairly describe the context, decisions, procurement processes and results to date of the Abbotsford Regional Hospital and Cancer Centre project.

Wayne Strelioff

Victoria, British Columbia
February 1, 2005

Wayne Strelioff, FCA
Auditor General

ANNEX TO THE REPORT OF THE AUDITOR GENERAL OF BRITISH COLUMBIA

Criteria for the Review Engagement

Reporting on the context, decisions, procurement processes and results to date of the Abbotsford Regional Hospital and Cancer Centre project should be, in both content and presentation:

1. Understandable i.e., the assumptions and judgements of management are clearly stated.
2. Accurate i.e., assertions are free from significant misstatements.
3. Rational i.e., cause-effect linkages are clearly described and plausible.
4. Complete i.e., there are no significant omissions of relevant facts or cause-effect linkages.
5. Qualified appropriately i.e., uncertainties around assumptions, estimates and predictions are described appropriately.
6. Relevant i.e., the overall presentation is consistent with the report's stated objective.

Purpose of this Document

Before entering into a public private partnership, Partnerships BC undertakes an analysis of the value for money achieved or expected over the life of the partnership. Value for money is a broad term that captures both quantitative factors, such as costs, and qualitative factors, such as service quality and protection of public interests.

Value for money is one of six key principles guiding public sector capital asset management in British Columbia. The others are:

- sound fiscal and risk management;
- strong accountability in a flexible and streamlined process;
- emphasis on service delivery;
- serving the public interest; and
- competition and transparency.

Since 2002, these principles have guided the B.C. public sector's approach to acquiring and managing assets such as bridges, roads and health care facilities. Ministries and other public bodies such as health authorities are encouraged to consider all available options for meeting their service objectives. Under the Capital Asset Management Framework, options are analyzed and, after considering the qualitative and quantitative advantages and disadvantages of each, the one that overall best meets service delivery needs and makes the best use of taxpayers' dollars is chosen.

In some cases, the best option may be traditional procurement – where assets are purchased entirely with taxpayer supported finance and operated exclusively by the public sector. In other cases, agencies may find innovative ways to meet their service needs without acquiring capital assets. In all cases, agencies are publicly accountable through regular budgeting, auditing and reporting processes.

In all of its procurement processes, including public private partnership agreements, the Province is committed to a high standard of public disclosure to ensure accountability. This report describes the rationale, objectives and processes that led to the use of a public private partnership for the Abbotsford Regional Hospital and Cancer Centre project, giving the public a clear sense of how and why the decision was reached to proceed with that option. It explains how value for money was measured and how it was achieved in the context of current market conditions. Where applicable, it also compares key aspects of the final agreement to other options considered for the project.

For more on the Province's Capital Asset Management Framework, go to **http://www.fin.gov.bc.ca/tbs/camf.htm**

For more on public private partnerships in B.C., go to **www.partnershipsbc.ca**

Partnerships BC management is accountable for the contents of this report, including the reasonableness of the facts, assumptions, and professional opinions that have been presented.

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1. Executive Summary

Achieving Value for Money

The Abbotsford Regional Hospital and Cancer Centre (AHCC) project is a long term agreement between the public sector and a private partner, wherein the public sector - the Fraser Health Authority (FHA) and the Provincial Health Services Authority (PHSA) - will provide clinical services to meet the current and future health care needs of Fraser Valley residents. The private partner, Access Health Abbotsford (AHA), has agreed to provide a high quality, well maintained hospital and cancer centre and facility management services including housekeeping, food, laundry and linen services to support effective health care delivery – in keeping with performance standards set out in the agreement.

Partnerships BC is managing project procurement through to the commissioning of the completed hospital and cancer centre, with the objective of delivering value for money.

This report addresses project planning and delivery up to finalization of the project agreement, which occurred on December 7, 2004. Value for money determinations at this stage are based on a range of analyses, projections and comparisons to other project delivery options.

The ultimate success of the project will be contingent on the successful implementation of the next stages of the project, which involve the detailed design, construction and commissioning of the hospital and cancer centre and, following that, provision of facility management services.

Partnerships BC's assessment of the key attributes of the project is described below.

Health Service Delivery

The AHCC is designed to meet established and future health service delivery needs in the Fraser Valley by:

- increasing capacity to meet the health service needs of a growing population;
- providing health care services not currently available in the region;
- incorporating the flexibility needed to accommodate future change; and
- responding to the project's vision statement (see box below)

Project Vision

Together we will create an innovative environment that inspires caring and the pursuit of knowledge and excellence.

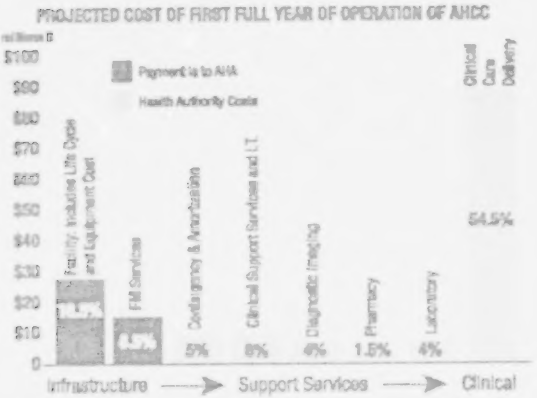
Guiding Principles

- Design care processes that optimize patient, client and family satisfaction
- Develop and apply integrated resources to enable:
  - seamless and sustainable care and support for patients and families
  - effective exchange of information
  - sharing of technology and services
  - ongoing learning and the development of new knowledge
- Develop and maintain a healing and aesthetically pleasing environment that is sensitive to diversity
- Foster a safe, comfortable and productive work environment that promotes provider recruitment, retention and satisfaction
- Create a flexible and adaptable design to accommodate future structures, processes, care delivery systems and technological needs
- Build and promote partnerships that improve effectiveness and efficiency
- Maximize cost effectiveness and the use of available resources
- Use technologies as a tool to improve cost effectiveness, integration of services and health outcomes
- Maintain the individual identities of the FHA and PHSA/BCCA while sharing resources and providing seamless services
- Minimize impact on the natural and physical environment

Cost

The cost of the AHCC includes a number of elements:

- The overall cost of the AHCC in the first full year of operation is expected to be $160 million: approximately 75 per cent is the cost of clinical health care and related services provided by the health authorities; the remaining 25 per cent represents the payment to AHA. This is illustrated in the chart below.



- This annual service payment to AHA commences at substantial completion of the hospital and cancer centre, and payments will continue for 30 years. For the first full year of operations (assuming no deductions or bonuses) the payment will be $41 million.
- Part of the annual service payment is for services such as food services, laundry and linen provision, and facility maintenance; part is to repay AHA for designing, building and financing most of the capital cost of the hospital and cancer centre. In total, including equipment, that capital cost will be $355 million. The Fraser Valley Regional Hospital District (RHD) is contributing $71 million to this capital cost, and the FHA is contributing $4 million towards equipment costs.
- In addition to these costs, there will be a one-time cost of moving into a new health care facility (for example, for relocation, staffing and training for the use of new clinical equipment), estimated to be $46 million.

Final Agreement: Quality

The final project agreement for the AHCC is designed to deliver a publicly-owned, high quality and well maintained hospital and cancer centre together with quality facility management services over 30 years, by:

- specifying detailed hospital and cancer centre performance and facility management service requirements the private partner has agreed to meet over the 30 year operating term of the contract;
- establishing a performance based payment system with incentives for the private partner to meet or exceed contractual requirements, as well as provision for deductions where performance does not meet requirements;
- requiring delivery of integrated facilities management services through a single point of contact; and
- defining required standards for the functionality of the hospital and cancer centre, and its condition at the end of the agreement.

Final Agreement: Benefits to Taxpayers

The agreement links payments to the private partner with performance and standards achieved and provides an optimal risk allocation, at a cost that is estimated to be less than a traditional public sector procurement model. Benefits include:

- transferring to the private sector many of the risks inherent in a major capital project, such as construction budget and schedule risks, and the subsequent cost of maintaining and operating the facility;
- providing a framework within which the private partner is expected to manage risk effectively through careful integration of facility design, construction, maintenance and operation; and
- incorporating levers to enforce the agreed risk allocation. For example, monthly installments of the annual service payment do not commence until the facility is substantially complete, providing a strong incentive for the private partner to finish construction on schedule.

Partnerships BC has analyzed the net present value of the final agreement compared to a conventional public sector project, including the estimated value of risk transfer. According to this analysis, an economic benefit is expected in the order of $39 million over the term of the agreement. That is, the net present value of the payments to AHA over the life of the contract (assuming no bonuses or deductions) is estimated to be $424 million, while the net present value of the cost of, hypothetically, building and operating a similar hospital fully within the public sector, over the same period, (the public sector comparator) is projected to be $463 million. This analysis is sensitive to a number of variables, including assumptions around the cost of capital over time and adjustments for risk (amounts are expressed in 2004 dollars).

Fair and Open Competitive Selection

A fair and open selection process has resulted in a contract with a partner that combines the expertise of a number of well qualified, experienced organizations. The process included:

- incorporating extensive due diligence in the development and implementation of a relatively new procurement process for B.C.;
- directly engaging the Ministry of Health Services (MHS), the health authorities and the RHD in structuring the project and defining procurement objectives; and
- maintaining competitive pressure while assessing a single proposal, through the use of a confidential cost benchmark (the public sector comparator or PSC), and by only committing to a contract when the full evaluation and negotiation processes were complete.

Ongoing Contract Monitoring

The project agreement includes arrangements designed to ensure that each phase of the agreement is implemented as intended, and the public sector is implementing arrangements to effectively monitor this:

- a collaborative detailed design development process between the private partner's architects, constructors and facilities management service providers and project team and health authority user groups is designed to ensure the hospital and cancer centre meets clinical functionality needs;
- during construction, the public sector project team will monitor AHA's progress closely, and an independent certifier will confirm milestones are met;
- during the operations phase of the project, the administration of the agreement will focus on confirming that performance standards are being met by AHA; as part of this, quality satisfaction surveys will be used to solicit feedback from patients, visitors, medical staff and health authority staff; and
- Partnerships BC will work with the MHS and the health authorities to undertake higher level, overall reviews of the project at intervals such as five and 10 years to establish whether the agreement is functioning as intended and the expected benefits have been realized.

Best Practices

The Abbotsford Regional Hospital and Cancer Centre is the first B.C. hospital to be procured as a public private partnership. This offers an opportunity to build on experience and develop best practices for B.C. Partnerships BC has identified best practices at each stage of project development, and is already drawing upon these for future projects.

2. Project Background, Rationale and Objectives

Public Private Partnerships in Health Care

Public private partnerships have been used for many years to build health facilities around the world. In B.C., they are consistent with the government's vision for modernizing health care, as set out in the December 2002 "Picture of Health" document. The document encouraged health authorities to explore public private partnerships where they can enhance patient care, deliver value for money and serve the public interest, consistent with the *Canada Health Act*.

In such partnerships, the private sector typically finances, designs, builds, maintains and operates a building to meet detailed performance standards. The Province and/or health authorities provide the clinical (patient health care) services and pay for the facility and facility services over time. Payments are tied to the agreed-upon performance standards. These include the standard of the building and services to be provided, and specified time periods to rectify performance that does not meet the agreed standards.

The partnership model is designed to capture the strengths of both the public and private sectors, recognizing that private companies have always played a part in delivering public infrastructure such as bridges, highways and hospitals. Partnership agreements build on that history and clearly delineate areas of responsibility for both sectors over the life of a long-term agreement. Key differences between the public private partnership approach and traditional project procurement are the inclusion of performance based payment, and the transfer of many of the risks inherent in capital projects to the private sector.

Public private partnerships are part of the Province's plan to provide affordable infrastructure that meets public needs. As health care demands continue to mount, this procurement model has the potential to maximize the value of taxpayers' investments in new health facilities.

Project Background & Rationale

The need for a new health care facility has been recognized for more than 15 years

The existing 202-bed Matsqui-Abbotsford-Sumas (MSA) Hospital was built in 1953 and last renovated in 1980. The decision to replace the hospital reflects a combination of various factors.

- The relative age and condition of the hospital would prevent it from being cost-effectively upgraded or expanded. This has been borne out by studies conducted in the late 1980s.
- The existing hospital lacks the capacity needed to provide health care to the regional population. Its number of beds has remained constant since 1980 while the population of Abbotsford has more than doubled. The region's population is expected to continue growing by between 1.5 and two per cent per year, which is greater than the general B.C. population growth rate, until at least 2015, driving increased demand for all health care specialties, especially obstetrics, pediatrics, psychiatry and surgery.
- The existing hospital is unable to support the outpatient and ambulatory programs, or provide the advanced medical technology, that are increasingly important in the delivery of effective health care.
- The FHA is committed to increasing the proportion of care provided to the region's residents by the region's hospitals. In recent years as many as 20 per cent of Fraser Valley residents have been treated in Vancouver.
- There is an established need to provide a cancer centre in the Fraser Valley. The design and construction of a new hospital offered the opportunity to incorporate a cancer centre

The AHCC is designed to meet the growing needs of the region's population

The FHA's Strategic Plan confirms the future role of the hospital as a regional referral centre. It will serve the core community care needs of Abbotsford residents, as well as the secondary acute care needs of residents of Fraser East (Hope, Chilliwack, Abbotsford, Mission and Agassiz/Harrison).

Specifically, the AHCC will provide the following programs and services:

- referral centre services for pediatrics (medical and surgical cases requiring hospital stays of longer than 48 hours), obstetrics, special care nursery, vascular, nephrology and oncology services;
- new outpatient programs such as renal dialysis, MRI (Magnetic Resonance Imaging) and nuclear medicine;
- enhanced services related to trauma and more complex critical care cases requiring surgical and medical resources;
- a regional role in inpatient acute medical and surgical oncology for Fraser East residents, in concert with the cancer centre;
- regional services in psychiatry, including six child and adolescent psychiatry beds and a four-bed intensive observation and treatment unit;
- acute patient palliative care and symptom management services; and
- a variety of ambulatory (outpatient) care programs.

The cancer centre will form part of the BC Cancer Agency's Lower Mainland network of services. Patients from the Fraser Valley will no longer need to travel to cancer centres in Vancouver or Surrey for treatment. This will be an important improvement, given the expected growth in cancer cases in the Fraser region. Over the next 10 years, the number of new cases is expected to grow by about 3.5 per cent per year, compared to growth of about three per cent in the Lower Mainland.

The cancer centre will support the following programs and services:

- multi-disciplinary consultation and care planning for new patients;
- chemotherapy;
- access to national and international clinical trials;
- radiation therapy and enhanced brachytherapy services;
- supportive care and pain/symptom management;
- nutritional consultation and rehabilitation support;
- patient and community education in cancer prevention;
- hereditary cancer program;
- breast health program in collaboration with the FHA; and
- professional education/liaison for community based cancer control programs.

The AHCC is also expected to become a centre for learning, incorporating resources such as a joint hospital/cancer centre library and learning centre, along with facilities to enable the development of partnerships with nursing and medical schools.

Project Objectives and Scope

The primary objectives of the AHCC project are:

- to deliver a new facility and services that meet all the expectations of the project's vision and guiding principles; and
- to deliver a competitively-priced hospital and cancer centre better in design, construction and operation than would have been provided through a traditional procurement process.

The scope includes the financing, design, development, construction, building maintenance and facilities management services for a complete facility, and the procurement of certain medical and other equipment. The facility and services must meet specified performance standards as described in the project's output specifications, which were developed in consultation with the health authorities.

The private partner will provide the following facilities management services:

- general management services (including management and administration of all other facility management services provided by the private partner, including functions such as human resources and quality monitoring);
- helpdesk services (provision of a single point of access to all facility management services);
- food services (patient and non-patient);
- housekeeping services;
- laundry/linen services;
- materiel services (management of goods and supplies);
- plant services (including facility maintenance, repair and replacement);
- protection services (security and safety);
- patient portering;
- utilities management; and
- parking services.

The health authorities will provide all clinical and diagnostic services, as well as facilities management services not listed above.

Project Procurement Planning and Options Analysis

The AHCC procurement followed extensive provincial and regional planning

Planning for replacement of the MSA Hospital has been underway since the late 1980s, with the decision to build a new hospital first announced in 1990. Plans were developed, including full working drawings ready for tender; however, the project was put on hold in 1997. It was reviewed again three years later and a proposal was developed to integrate a cancer centre. A business case for procuring the project as a traditional capital project was approved by the Province in spring 2001.

Later that year, the Province requested another review of the project plan – this time, to focus on the possibility of increasing private sector involvement to help reduce public sector costs and risks while maintaining or improving quality. This review reflected the policy goals of improving the capital project planning process and promoting sound fiscal management, public accountability and achievement of better value for taxpayers' dollars.

The Finance-Design-Build-Operate-Maintain Model demonstrated the greatest potential to provide value for money

Consistent with the requirements of the Capital Asset Management Framework, the project team considered traditional procurement and three public private partnership procurement options:

- Traditional Capital Project, wherein the public sector owns, finances, operates and maintains the facility, with private partners engaged in design and construction under separate contracts.
- Design-Build-Maintain, wherein the public sector owns, operates and finances the project but engages a private partner to design, construct and maintain the facility for a specified period of time.
- Design-Build-Operate-Maintain, wherein the public sector owns and finances the project but engages a private partner to design, construct, operate selected facility management services and maintain the facility for a specific period of time.
- Finance-Design-Build-Operate-Maintain, wherein the private partner owns, finances, designs, constructs, operates selected facility management services and maintains the facility.

Each of the public private partnership options was assessed against the traditional capital procurement model. While the total project costs of all the options were estimated to be financially similar, the project team's analysis concluded that the Finance-Design-Build-Operate-Maintain model offered the best potential to deliver value for money through innovation, timely delivery and the most effective risk transfer to the private sector. This model was later adapted to retain public sector ownership of the land and hospital and cancer centre.

Expected Benefits of the Preferred Option

In November 2002, the Province approved the Finance-Design-Build-Operate-Maintain model on the basis of the following expected benefits:

- expedited construction and commissioning from the time of contract finalization;
- high levels of patient satisfaction;
- a shift in the way health facilities and related services are planned, financed and delivered, placing greater emphasis on performance standards and outcomes and improved cost effectiveness. This was viewed as being important for the future of health care in B.C.;
- the transfer to the private sector of risks that some public sector organizations have had difficulty in managing over time, such as construction risk, the risk of cost overruns, and operating risks, for example with regard to facility maintenance and functionality; and
- increased financial discipline: experience in other jurisdictions has demonstrated that private partners with at-risk capital invested in projects have a greater stake in ensuring that facilities operate fully, reliably and efficiently.

Project Implementation

A governance and management structure was put in place to guide project development, procurement and implementation. It included a project team and a company – Abbotsford Hospital and Cancer Centre Inc (AHCC Inc) – established under the *B.C. Company Act* as a formal decision making and contractual vehicle. For further details on the steps taken to structure the project, see Appendix A.

Artist's rendering of the main entry

3. Competitive Selection Process

Objectives

The competitive selection process had the following key objectives:

- select a qualified, experienced partner to finance, design, build, maintain and operate facilities management services for the AHCC;
- implement a fair, timely and competitive procurement process; and
- achieve value for money.

Procurement Process and Timetable

Procurement Stage	Process	Timing
Request for Expressions of Interest	In this stage the project was marketed internationally. Expressions of interest were evaluated and qualified respondents were short-listed for the proposal stage.	January 23, 2003 to May 26, 2003
Request for Proposals (RFP)	The Request for Proposals and draft project agreement documents were developed. Proponents were asked to submit proposals. The original two step proposal process (submission and evaluation of initial proposals, followed by two proponents being asked to submit detailed proposals for evaluation) was revised into a single stage following the withdrawal of one of the four proponent teams. At the conclusion of this stage a preferred proponent was designated.	May 26, 2003 to May 14, 2004
Contract Finalization	This phase involved the negotiation of issues with the preferred proponent and completion of due diligence by both parties prior to finalizing and executing the project agreement.	May 14, 2004 to December 7, 2004
Project Development to Substantial Completion	This phase will include the design development, construction and commissioning of the facility for clinical use.	December 7, 2004 to May 6, 2008

Competitive Selection Results

The market demonstrated significant early interest in the project: four expressions of interest were generated from qualified teams

The 2003 release of the Request for Expressions of Interest generated significant interest with 61 company representatives attending a respondents' information meeting. Four expressions of interest were received and evaluated by a committee that included representatives from the project team, MHS, the FHA and the PHSA.

All four respondents qualified for the proposal stage of the competition, bringing a range of B.C., Canadian and international experience in design, construction, facilities management services and financing. The members of each consortium are listed in the table below.

Respondent	Facilities Management Provider(s)	Construction Services Provider	Financing Provider/Arranger
Access Health Abbotsford	Johnson Controls, Sodexho	PCL Constructors	ABN AMRO Bank
Fraser Valley Health Partnership	Ecovert FM	Bouygues Batiment, Stuart Olson	Macquarie North America
The Healthcare Infrastructure Company of Canada	Carillion Canada, the Compass Group, Oxford Properties	EllisDon Corporation	CIT Structured Finance, BMO Nesbitt Burns
Vancouver Health Care Group	ARAMARK Canada	Aecon Construction Group	Gibralt Capital, TD Securities

Request for Proposals (RFP) Process

The RFP and a draft project agreement were released to proponents on September 25, 2003. The draft agreement set out the proposed terms of the contract between the public and private partners.

Partnerships BC implemented a process to identify and resolve potential deal breakers early in the competition

The RFP allowed proponents to review the draft project agreement and notify the project team of any essential amendments they would require to participate in the competition. This step was taken to avoid any barriers that could arise due to unidentified but fundamental issues, and to ensure proponents were willing to contract on the proposed risk allocation.

Essential amendments were received and reviewed by the project team, the health authorities and MHS. A number of changes were recommended to the draft project agreement, approved by the AHCC Inc board, and communicated to the proponents.

Proponents were also invited to provide more general comments on the proposed agreement

This process allowed proponents to request amendments to the draft project agreement. More than 400 amendments were requested by proponents and reviewed by the project team with health authority and MHS representatives. Some further changes were approved by the AHCC Inc board (for example the adoption of suggestions with the potential to improve overall value, and the clarification of minor ambiguities) and the draft project agreement was amended as a result.

Participation in the competition was confirmed in a Proposal Competition Agreement

On November 19, 2003 two of the four proponents signed the Proposal Competition Agreement and provided AHCC Inc with letters of credit confirming their participation in the proposal competition. The Proposal Competition Agreement also made provision for partial payment to unsuccessful proponents that completed a proposal to offset some of the cost of proposal development, and to secure intellectual property rights to material from unsuccessful proposals.

The two confirmed proponents were Access Health Abbotsford (AHA) and The HealthCare Infrastructure Company of Canada.

Partnerships BC implemented an effective request for information and bilateral process

Recognizing the need for controlled information flow between proponents and the project team during proposal development, the RFP established an inquiries and communication process, including a request for information process and a series of full and partial team bilateral meetings. The bilateral meetings provided comments and feedback on the general acceptability of proponents' ideas and were attended by project team members, technical and commercial advisers, and health authority stakeholders.

Between October 2003 and April 2004, the project team responded to 118 requests for information and issued 14 addenda to the RFP document.

Partnerships BC responded to the single proponent situation by retaining the RFP framework but strengthening evaluation

In January 2004, during proposal development, one of the two confirmed proponents, The HealthCare Infrastructure Company of Canada, withdrew from the competition.

Partnerships BC reviewed procedural options in light of the single proponent situation, and decided to retain the established RFP process because it provided a rigorous framework of proponent requirements, and a comprehensive evaluation process that needed to be satisfied before a final agreement could be negotiated. The evaluation process was strengthened by increasing the reliance upon and weighting of the public sector comparator (PSC) as the primary financial benchmark. The PSC was kept strictly confidential to help maintain competitive pressure. Confidentiality was also maintained around the project team's estimates for the value of risks.

AHA submitted a proposal on April 16, 2004.

Evaluation of AHA's Proposal

PBC completed a comprehensive and rigorous evaluation process

Proposal evaluation was undertaken in two stages:

- Preliminary review and initial affordability confirmation: The proposal was checked for completeness, clarifications were requested, and the cost of the total service payment in the first full year of operations was confirmed.

- Detailed review: The proposal was evaluated in detail against the evaluation criteria set out in the RFP in each of the following categories:
  - clinical operations, efficiency and design
  - facilities management services and human resources
  - construction
  - financial
  - partnering relationship and team integration and delivery
  - risk transfer and commercial considerations.

Sub-panels evaluated the proposal's strengths and weaknesses in each of these categories and made recommendations to the proposal evaluation committee, which included representatives of the project team, MHS and the health authorities. The committee made an overall assessment of the proposal and determined whether requirements of the RFP had been satisfied.

Artist's rendering of the exterior of the building

Following this process, the evaluation committee recommended that contractual negotiations should be entered with AHA. This was confirmed by the AHCC Inc board in mid-May 2004, subject to the satisfactory resolution of issues in the proposal that required negotiation.

The project's process monitor concluded that the competitive selection process was fair

Partnerships BC engaged a process monitor to advise the project team on the development of documents and processes during the competition. The process monitor was mandated to act as an independent observer during both the bilateral process and the evaluation process. The monitor concluded that both the Request for Expressions of Interest and the RFP stages of the competition complied fully with the Province's policy for fairness, transparency and accountability, and were conducted in accordance with best practices for government procurement in Canada.

Contract Finalization and Contractual Close

Partnerships BC established a team to negotiate a firm contract with AHA, and a process to ensure that health authorities and MHS were aware of progress and consulted on key operational issues. Negotiations proceeded steadily from mid-May through July 2004, when the detailed terms of the agreement were established. Final negotiations and due diligence were completed between July and December 2004.

Competitive Selection Costs

The AHCC is the first major hospital procured in B.C. as a public private partnership, and a high level of diligence was needed to effectively implement this new procurement approach. Procurement costs, including the costs of transaction and legal advisors, were $14.5 million to financial close. This represents approximately 3.4 per cent of the project's net present value, or 4.1 per cent of the construction capital cost of the facility and equipment.

More than half of these costs represent an investment in establishing best practices that will be applied to, and help reduce procurement costs for future public private partnership projects. In fact, the form of project agreement developed for the AHCC has already been used as the starting point for another public private partnership project (the Britannia Mine Water Treatment Plant).

The treatment of these and other public sector procurement costs is further addressed in Appendix B.

4. Changes in the Project

The AHCC project has undergone significant changes

Since the original business case for the AHCC was approved in 2001:

- the scope of the project has been significantly enhanced to reflect emerging health care trends;
- market changes, including significant construction inflation in the BC market, have driven up projected costs; and
- negotiations during the procurement process have changed some details of the project agreement.

The cost of these changes has been tracked by modeling the capital cost element of the public sector comparator (PSC) over time, providing a benchmark for comparison with the capital component of the private sector proposal. Changes are summarized in the table below and addressed in greater detail in the text that follows.

Changes in Project Capital Estimates

	Business Case 2001	Fall 2002	RFP 2003	December 2004
Capital cost estimate for a publicly procured project (public sector comparator)	**$211 million**	**$251 million**	**$328 million**	**$369 million**
Summary of Net Change				
Facility Scope		0	$46 million	0
Inflation		$8 million	$30 million	$25 million
Risk Valuation/Better Estimates/Other		$32 million	$1 million	$16 million
Actual capital cost – final project agreement	**n/a**	**n/a**	**n/a**	**$355 million**

Business Case Approval to Fall 2002

Capital Estimates provided in the 2001 business case were reviewed and updated

The 2001 business case envisaged a hospital and cancer centre with a capital cost of $210.5 million, to be procured as a traditional capital project and delivered in 2005. In fall 2002, the project was approved with the same scope but as a public private partnership. The capital estimate was revised to $251 million, due to:

- inflation ($8 million);
- replacement of traditional contingencies (which involve a rule of thumb estimate) with a more accurate estimate of the expected value of risks that might arise during procurement and construction ($31 million); and
- additional legal ($0.5 million) and Goods and Services Tax related costs ($0.5 million).

Fall 2002 to RFP Release (September 2003)

Significant enhancements were made to the hospital and cancer centre scope

Heath care is a fast developing area, significantly affected by a series of emerging trends. These currently include increasing moves towards short-stay and outpatient care, increased use of procedures such as MRI and nuclear medicine, and new clinical challenges such as the SARS (Severe Acute Respiratory Syndrome) virus.

In light of this changing landscape, a clinical best practices review was undertaken in 2002 to reassess the hospital and cancer centre program developed in 2000 and ensure that the AHCC could fulfill its role as one of three FHA regional referral centres. The process included literature reviews, visits and discussions with medical centres of excellence, interviews and discussions with physicians, nurses and other professionals from each program area, and input from experienced clinical programming consultants.

The project team, the health authorities and their professional staff then developed a final clinical program and detailed output specifications for the project. Changes in scope at that stage included the following.

- Clinical best practices improvements
  - more space for education/academic activities;
  - changes related to infection control (for example, four-bed rooms became private or semi-private and the number of isolation rooms was increased to 50, driving significant increases in equipment requirements);
  - equipment enhancements, for example in diagnostic imaging;
  - intensive care and coronary care units were separated; and
  - a rehabilitation room was added to the surgical floor.
- Increased capacity for digital applications in the hospital and cancer centre
  - the potential to accommodate electronic administration and records; and
  - two of the eight operating rooms will be high technology digital operating rooms, equipped with what is referred to as "OR1" technology, including video and teleconferencing facilities.
- Facility and environmental improvements
  - separate entrances for ambulatory/cancer and emergency care;
  - changes in building design to meet LEED (Leadership in Energy and Environmental Design) Silver standards, setting a positive environmental example and improving energy efficiency.
- Cancer centre enhancements
  - increased areas for radiation therapy; and
  - new breast and hereditary cancer programs to improve screening and treatment.

As a result of these changes the building size was increased by 10 per cent and the overall estimate of capital cost, including equipment, increased by approximately $46 million.

The scope of facilities management services was modified

Following a review of alternative service delivery options, a list of non-clinical facilities management services, some of which were optional, was proposed in the Request for Expressions of Interest. This list was refined for the RFP to reflect market response and decisions by the project team (see the next page). Services removed from the scope of the agreement will be performed by the public sector.

Market changes further affected estimates of project cost

In addition to the increased facility scope, rising construction costs and general inflation further increased the capital cost estimate. When the RFP was released, the PSC capital estimate for the facility was $328 million, with an expected first year annual service payment of $40 million.

RFP (September 2003) to Financial Close (December 2004)

The scope of facilities management services was further modified

During the proposal stage of the competition, two services – biomedical engineering and medical record transcription – were removed from the bundle that would be provided by the private partner. This decision followed feedback from proponents that they would be unlikely to offer value for money in these areas, which are not currently outsourced in Canada. That made it difficult for proponents to scope them and price the service and risk transfer involved. Both services will be provided by the health authorities.

The following table provides an overview of changes to the facilities management service bundle throughout the competition process.

Changes to the Facilities Management Service Bundle

Expression of Interest January 2003	Request for Proposals September 2003	Final Agreement December 2004
• general management • helpdesk • food services (patient and non-patient) • housekeeping • laundry/linen • materiel services • plant services • protection services • patient portering • utilities management • parking services • biomedical engineering • transcription • facility management services for Worthington and Cottage Pavilions (existing extended care facilities) • central processing and sterilization • redevelopment of the existing MSA site	• general management • helpdesk • food services (patient and non-patient) • housekeeping • laundry/linen • materiel services • plant services • protection services • patient portering • utilities management • parking services • biomedical engineering • transcription	• general management • helpdesk • food services (patient and non-patient) • housekeeping • laundry/linen • materiel services • plant services • protection services • patient portering • utilities management • parking services

Market conditions changed dramatically

Between the release of the RFP and the pricing of the proposal, construction cost inflation in the B.C. market increased dramatically, due to a building boom fueled by housing growth as well as the prospect of major projects related to the 2010 Olympic Games, the Richmond/Airport/Vancouver (RAV) rapid transit project and the Vancouver Convention Centre.

Project estimates of 2.5 per cent inflation were replaced with actual and forecast inflation rates ranging from three to seven per cent to 2008. The project's cost consultant concluded that construction inflation would add approximately $25 million to estimated costs.

Additional items were added to the budget

Prior to receipt of the proposal, Partnerships BC identified a number of items that had not been included in the original PSC capital estimate, but needed to be added to allow the PSC to be compared to the public private partnership. These items included public sector management costs, which had not previously been taken into account (estimated to be around $8 million in a publicly procured project); the cost of facilities management services equipment (approximately $6 million); and the cost of the equipment procurement team (approximately $1 million).

Further costs not recognized in PSC calculations were identified during evaluation of AHA's detailed proposal. For example, the proponent identified additional costs around off-site hydro requirements (approximately $2 million), municipal levies (approximately $1.5 million) and soil survey costs (approximately $2 million), and demonstrated that the cost of achieving a LEED Silver standard building would be higher than previously estimated (approximately $1 million more). These additional costs were also added to the PSC capital estimate so that the two estimates could be compared.

These increases in the PSC capital estimates after the release of the RFP (totaling approximately $25 million) were partially offset by a reduction in the valuation of risk (by approximately $9 million) over the same period, reflecting ongoing review and evaluation of risk values as the project developed.

The final estimate of the PSC capital cost for the project was approximately $369 million.

Final Cost Estimates and Actual Costs

The AHA proposal exceeded the RFP target for capital costs. However, a review by a third-party cost consultant concluded that the proposal pricing was consistent with current market conditions.

Following negotiations, the agreed-upon cost of the capital construction and equipment component of AHA's contract was $355 million.

Project Affordability

Capital costs represent a relatively small proportion of the long term cost of a project like the AHCC; good decisions made during the design of such a hospital and cancer centre may increase capital costs, but can also increase efficiency and reduce operating costs (both for the provision of clinical health care services and facility management services) over the longer term.

To recognize this, overall project affordability, and often project related decision-making, is based on projected total annual operating costs. The most significant of these are the health authorities' clinical care and related costs; the other major cost is the annual payment to the private partner, which reflects repayment of most of the facility's capital costs, as well as maintenance and facility management services.

In fall 2002, Provincial Treasury Board set the project affordability target at $151 million for the first year of operations. Assumptions and estimates have been continually updated as the project has progressed. For example, although the capital costs proved greater than expected, the final agreement is competitive on facility management services; the annual payment therefore varies less than might be expected from the expectation at the time the RFP was released. The final total service payment in the first full year of operations will be $40.3 million, or $40.8 million including GST.

Based upon the current estimates of the health authorities direct operating costs and the cost of the annual payment to the private partner in the final agreement, the estimated first full year operating cost for the AHCC is $160 million.

Cost estimates for the first full year of operation of the AHCC over time

	Decision to proceed with a public private partnership Fall 2002	Release of RFP September 2003	Final Agreement December 2004
Overall estimated project cost (first full year of operations)	**$151 million**	**$151 million**	**$160 million**
Cost breakdown: Health authority clinical and operating costs	$116 million	$109 million	$112 million
Estimated public private partnership payment	$35 million	$40 million	$41 million
Other		$2 million[1]	$7 million[2]

[1] Contingency (unallocated annual amount to address unforeseen issues that may arise)
[2] Contingency, plus net amortization expense, a non-cash item, due to the asset being consolidated into the Province's accounts for a 40 year period

5. The Final Agreement

Profile of the Private Partner

Access Health Abbotsford (AHA) combines the expertise of a number of specialist organizations.

- **Design:** The facility design team includes Silver Thomas Hanley, an Australian architecture firm with extensive health care experience, including in the design of cancer care facilities, and Musson Cattell Mackey, a well-established Vancouver-based architecture firm.
- **Construction:** PCL Constructors Westcoast is a member of the PCL family of companies. PCL is a major Canadian construction contractor and has extensive experience in North America on health related facilities. PCL is building, or has built, health care facilities in eight provinces and all three territories. Examples of recent projects include the Ambulatory Care Expansion at Women's and Children's Hospital in Vancouver and the Health Sciences Centre in Winnipeg. Equipment Planning Associates, a Canadian firm with expertise in medical equipment planning and experience, will support PCL in procuring equipment for the facility and will coordinate technical design and construction with equipment requirements.
- **Facility management services:** Property management services, including facility and physical asset maintenance, will be provided by Johnson Controls. Johnson Controls has wide experience in the development, integration and installation of building systems and controls. Its recent experience includes projects at Royal Inland Hospital in Kamloops and St. Johns Rehabilitation Hospital in Toronto.
  Facility management services including help desk, housekeeping, materiels, patient portering, laundry and linen, food services and parking will be provided by Sodexho, a company with extensive experience in the provision of health care support services, supported by other well qualified facility management service providers; for example, parking services will be provided by Intercon.
- Project development and financing: ABN AMRO is one of the world's largest financial institutions and has operated in Canada's wholesale banking market for over 50 years. ABN has been involved in structuring and underwriting more than 35 public private partnership agreements in various global markets.

Key Terms of the Project Agreement

Facility and Facility Management Service Provision and Standards

AHA will deliver a 300-bed (with 261 planned to open in May 2008), 60,000 square metre hospital and cancer centre at a new site on Marshall Road in Abbotsford, and will provide facilities management services for the new facility. Specifically, AHA will:

- design and construct the AHCC facility to an agreed-upon standard;
- finance the capital cost of the facility over the term of the project (with the exception of the capital contribution made by the Fraser Valley Regional Hospital District (RHD));
- manage and operate the facility to agreed performance standards with respect to:
  - general management;
  - helpdesk;
  - food services (patient and non-patient);
  - housekeeping;
  - laundry/linen services;
  - materiel services;
  - plant services (including facility maintenance);
  - protection services;
  - patient portering;
  - utilities management;
  - parking services; and
- maintain the hospital and cancer centre to an agreed-upon performance-based standard over the term of the agreement, including the rectification of defects or deficiencies that arise in the facility.

Benchmarking and market testing

Under the agreement, every five years the cost of services such as food services and laundry and linen supply will be compared against the general market cost of the same services. Provided that AHA's performance in the preceding five years have met requirements, its pricing for each service would be benchmarked against comparable service providers. Should AHA prove to no longer be competitive, or if their satisfaction ratings do not meet requirements, AHCC would have the option of proceeding to full market testing. This would involve re-tendering the specific service, and could potentially result in a change of the sub-contractor within the AHA agreement. Any upward or downward change in the cost of specific services following benchmarking or market testing would be reflected in the annual payment to AHA.

Legal and Commercial Structure

Ownership of the site and hospital and cancer centre remains with the public sector. AHA is granted a non-exclusive licence to construct, manage and operate the facility from the date of the project agreement to the end of the project term. In addition, AHA has rights to provide patient entertainment and two areas of retail space, and may in future propose other commercial opportunities (subject to AHCC Inc approval).

The contract term is 33 years and five months. This includes a construction period and 30 years of operations from the expected date of substantial completion. The condition of the hospital and cancer centre at the end of the term is specified in the agreement.

Public Interest Considerations

The project agreement is designed to protect the public interest through performance standards for operations and maintenance. These are supported through performance payments. AHCC Inc also has remedies available to address any deficiencies or breaches of the agreement. For example, it has the right to perform work itself where AHA fails to do so and offset related costs against payments to AHA.

The agreement also stipulates that service providers retained by AHA must be consented to by AHCC Inc, and that AHA will not provide health care services to patients.

The agreement includes a dispute resolution mechanism to deal with any difference in interpretation or other disagreement relating to the project agreement. The mechanism comprises processes to resolve disputes and obtain binding decisions.

Termination provisions are in place in the event that either AHCC Inc or AHA fails to meet its obligations under the project agreement.

Design

AHA has drawn from health care facilities around the world to produce a preliminary design expected to be clinically functional and efficient, and to create a healing environment that will reflect the project vision. The AHA design team continues to work closely with health care professionals on detailed design to ensure the facility meets the needs of patients, care providers and other users.

Features of the new facility include:

- a preliminary design that meets or exceeds requirements for clinical functionality, operational efficiency and design objectives. For example, maternity and the maternity operating room are located adjacent to the operating suite, providing flexibility in operating room use, improving maternity patient safety (due to the proximity of the operating suite), and improving efficiency by co-locating all operating rooms;
- site utilization that maximizes the preservation of natural features and is compact, allowing room for future expansion and additional commercial uses on the site;
- a design that includes the flexibility to adapt to future health authority needs, and is capable of both horizontal and vertical expansion if required at a later date;
- a design that is aesthetically pleasing, creating a healing environment. For example the use of natural light is maximized. Most patient rooms are single occupancy with direct access to windows, and support departments (such as the pharmacy) are located on upper floors with access to daylight.

- a design that is planned to meet LEED Silver standards of environmental design and energy efficiency. The AHCC will be the first hospital in Canada to do so; and
- access to the outdoors for patients, families and staff through a series of indoor and outdoor courtyards and a roof deck.

Integrated facility management services

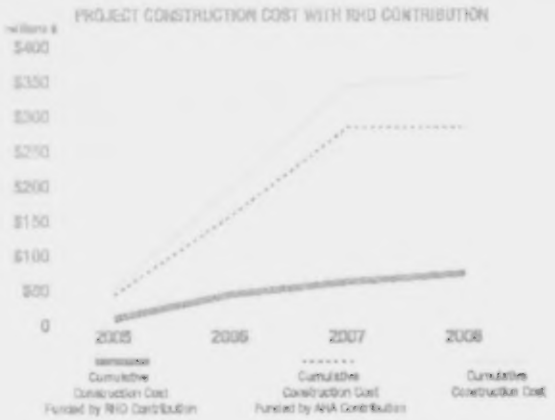
The project agreement provides for integrated facility management services. A single help desk will manage facility management service delivery and provide a system for monitoring and reporting quality. Health care professionals and other users will be able to contact all service areas, from housekeeping through to security, through a single point of access. This is a much simpler arrangement than exists in any other B.C. hospital.

Financial Summary

Capital Financing

ABN is financing the project through an equity investment and the issuance of bonds which escalate at a fixed percentage over time.

The RHD is contributing $71 million to the capital cost. Maximum financial benefit from these funds is obtained by investing them as early as possible in the construction process. To minimize risk to these funds, the capital will be flowed to AHA on a quarterly basis during project development, provided AHA can demonstrate that it has completed certain works.



Cost to the Public Sector

The final cost of the project agreement (excluding the RHD's capital contribution) can be expressed as a net present value (NPV), which expresses future amounts in today's dollars. In NPV terms, the agreement will cost the public sector approximately $424 million over 33 years, assuming there are no bonuses or penalties applied to the payments to AHA. This is about $39 million less than the estimated $463 million NPV cost of the public sector comparator (also excluding the RHD contribution), which is the hypothetical estimate of costs if the project were built, maintained and operated by the public sector. (Net present values calculated as at April 30, 2004.)

The NPV figures above were developed using a discount rate, which represent the costs of capital over time, taking into account factors such as inflation and interest rates. A real (that is, excluding inflation) discount rate of six per cent was used, based upon international market practices and benchmarks at the time (for example a real rate of six per cent used in the U.K., real rates of six per cent to eight per cent in Australia, and a real rate of seven per cent in the U.S. for general public sector investment), and following consultation with B.C. Provincial Treasury. Sensitivity analysis of the six per cent discount rate showed that the NPV cost of the agreement would have been about $13 million less than that of the public sector comparator if a five per cent discount rate were used, and about $59 million less if a seven per cent rate were used.

For a more detailed comparison of the NPV of the final agreement with the public sector comparator, see Appendix B.

While these net present value differences are relatively modest, the final agreement is expected to provide additional value for money by:

- shifting risk away from the public sector and making risk management substantially the responsibility of the private partner;
- providing the public sector with greater certainty around the availability and ongoing standard of the hospital and cancer centre it will receive; and
- providing other qualitative benefits not captured in the present value calculations (see Chapter 6: Comparisons for further detail).

Risk Allocation Summary

Risks have been allocated to the partner best able to cost-effectively manage them. For example, the public sector is better able to determine whether hospital and cancer centre design will meet health authorities' clinical functionality needs. Similarly, the private partner will be better able to ensure the design will be cost effective from an operational and maintenance perspective over the facility's lifecycle.

Some risks are shared. For example, for utility usage, both partners will share additional costs associated with inefficiencies, and both will benefit from energy efficiency. For every shared risk the project agreement stipulates how the risk will be allocated, for example, by providing thresholds for each party's responsibility for a certain risk. In the event of any difference in interpretation of the risk allocation, the dispute resolution mechanism would apply.

The following table provides an overview of risk allocation for the project. Check marks in both columns indicate areas of shared risk.

Risks relating to:	Public (AHCC)	Private (AHA)
Financing		✓
Design (Clinical Functionality)	✓	
Design (Fitness for Purpose)		✓
Construction (Schedule & Cost)		✓
Equipment Procurement and Installation	✓	✓
Facilities Management Services (Standards and cost) *		✓
Maintenance/latent defects		✓
Relief Events (for example earthquake or flood)	✓	✓

* costs are subject to periodic market testing for some services

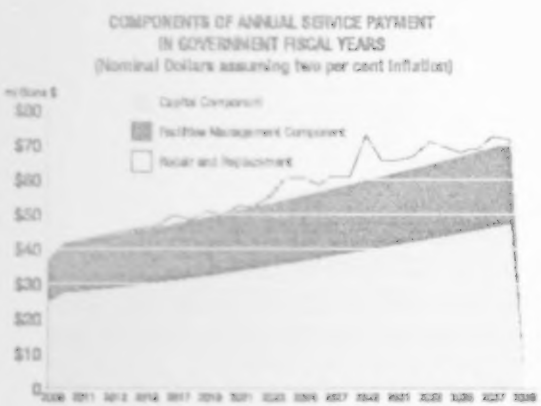
This risk allocation is supported by the following contractual provisions:

- AHCC Inc starts making performance based payments only when an independent certifier confirms that the facility is substantially complete;
- the expiry date of the agreement is fixed, so any delays in completing construction reduce payments to AHA, providing a strong incentive for timely completion; and
- provisions are in place for payment reductions if AHA does not meet agreed-upon standards for facility operation and maintenance.

Performance Payments

When the hospital and cancer centre is ready for occupancy, AHCC Inc will commence performance-based payments to AHA for the facility, its maintenance and facilities management services over the term of the contract.

The following graphs demonstrate the anticipated payment stream to AHA over the term of the agreement (the first graph is expressed in constant 2008 dollars, with the effects of inflation removed; and the second graph is expressed in nominal dollars, that is future year dollars assuming two per cent inflation); payment projections assume that there are no bonuses or penalties. As the graphs illustrate, the payment mechanism provides for a broadly constant total annual service payment in real terms while repair and replacement payments are "sculpted" to recognize major asset maintenance costs when they are expected to occur, rather than prepaying them.



Actual payments will be made in thirteen payment periods throughout each year, based on a contractual payment mechanism that takes into account facility availability and service quality. Deductions will be made for non-availability and failure to achieve defined service quality levels.

For example, the agreed-upon standards require that at all times heating, air conditioning and mechanical ventilation systems are functioning as intended. If a problem is not rectified within a specified period of time, it is categorized as a failure event.

Payment deductions are based on the severity of the failure, the importance of the rooms affected, and their degree of availability. For example, the deduction for one full day of unavailability would be $180 for a public washroom, $900 for a patient bedroom, and $2,250 for an MRI procedure room.

The contract also allows AHA to achieve bonus payments for consistently good performance, which will be judged through quality satisfaction surveys.

Expected Budget Reporting and Accounting Treatment

The AHCC facility will be treated as an asset by AHCC Inc and consolidated into the financial statements of the health authorities and the Province. Upon completion of construction, the recorded book value of the facility will be amortized over 40 years.

Construction Milestones

- Site preparation – December 2004
- Start of construction of foundations – March 2005
- Substantial completion of construction – April 2008

Further information, including the project agreement and output specifications, are available on the project website **www.abbotsfordhospitalandcancercentre.ca.**

6. Comparisons

Value for money is a broad term that captures both quantitative factors, such as costs, and qualitative factors such as service quality. Partnerships BC looks at a broad range of factors in determining whether a project offers value for money to taxpayers, including comparison of the final agreement to other benchmarks – in this case, the expected results of a hypothetical traditional public sector delivery model, and the expected results of a hypothetical public private partnership model, assessed prior to the procurement process.

Operational efficiency and clinical functionality

- Traditional public sector delivery can achieve very good results in designing a new health care facility through careful scope definition and close cooperation between clinical planners, health authority users and architects. The partnership approach was expected to add to the traditional approach, which can be more prescriptive, by encouraging the private sector to focus on outcomes and bring forward new ideas for meeting hospital and cancer performance requirements.
- AHA provided a strong preliminary design. During negotiations, AHA's clinical planner worked with AHCC's project team and health authority planners to further develop the design, and the results to date have been well received by the health authorities.

Design and Construction

- The public private partnership model is expected to deliver the standards required as cost effectively as possible. The integrated nature of the project agreement is expected to balance short term design and construction with the need to consider the future costs of facility management service provision, maintenance and repair.
- Discipline will be brought to the process by lenders who will pay close attention to meeting the construction budget and schedule as well as longer term costs.
- The final agreement incorporates design and technical solutions that are new in B.C. For example, most B.C. hospitals include horizontal interstitial spaces (spaces between floors) in diagnostic and treatment areas to allow maintenance to take place without disrupting clinical services; the AHCC will include vertical interstitial spaces in these areas, which need less space, are less expensive, and provide flexibility in the hospital and cancer centre.

Equipment

- Early market sounding indicated there was potential to bundle a significant proportion of facility equipment with the contract, driving innovation and reducing costs. During proposal development, it became apparent that additional value for money would not be achieved this way, and AHCC Inc decided to deliver most equipment through a cash allowance, retaining the risk of technology and price changes in these areas. An advantage of this is the ability to make equipment selections as late as possible, thus procuring the latest medical technology available.
- A benefit of the final agreement is that AHA will be responsible for the procurement and installation of the equipment, and associated risks – such as ensuring that the equipment is installed when the hospital and cancer centre is ready to open, and that service outlets are correctly located in rooms to meet equipment needs.

Facilities management services

- An expected benefit of the partnership model is the introduction of a linkage between detailed performance standards and payment. This has not previously been available in public sector facilities management delivery, although recent outsourcing contracts have similar provisions.
- Partnerships BC believes that AHA's integrated facilities management solution, and the provision of all services through a single help desk, will prove to be a significant benefit, simplifying health professionals' access to these services.

Delivery time

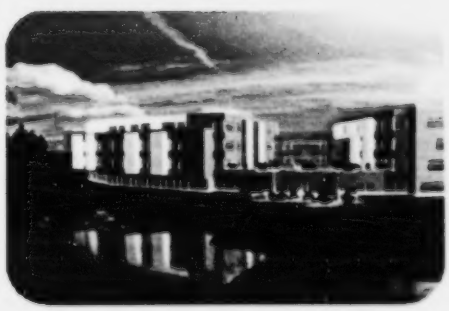
- Partnerships BC assumed that traditional procurement, with separate contracts for design and construction, would involve a 50 month delivery period from contract signing to commissioning. The expected public private partnership delivery time was 36 months. The final agreement is based on 41 months.

Financial

- When the project was approved as a public private partnership, the cost was expected to be similar to a traditional approach. Based upon the current financial analysis, both the net present value of the hypothetical traditional and public private partnership models would be $463 million.
- The final agreement has a net present value of $424 million, demonstrating modest expected present value savings of $39 million over the benchmark estimates.

Risk transfer

- In traditional projects, design, construction, operations and maintenance are rarely integrated and the public sector retains significant risk.
- Expected risk transfer was reflected in the project's request for proposals; AHA proposed slightly less transfer of risk but at a lower cost, resulting in a more optimal final risk allocation than had been expected.
- The level of investor capital (debt and equity) at risk also provides a high level of comfort that AHA will meet its contractual responsibilities.



Artist's rendering of the existing entrance

7. Ongoing Contract Monitoring

Partnerships BC is implementing a project management structure tailored to the needs of the development phase of the project

Partnerships BC is responsible for implementing the project agreement through to facility commissioning and hand-over to the health authorities. Development phases are highlighted below:

Procurement (to financial close)	Design Development	Construction/ Commissioning	Hand-over to health authorities	Start-Up/ Relocation from MSA
COMPLETE	November 2004 to April 2005	January 2005 to May 2008	May 2008	May 2008 to July 2008

Partnerships BC, through AHCC Inc, is implementing a management structure intended to ensure AHCC Inc can meet its contractual responsibilities and exercise its rights under the project agreement.

Stantec Consulting, a firm with extensive experience in major construction and project management, was retained to review and make recommendations on the project management organization going forward, particularly in relation to the initial design phase. A project management model was proposed that included the appointment of a dedicated project manager with extensive experience managing construction projects, and a user group process to coordinate health authorities' input during design development. These recommendations have been implemented, along with traditional tools and controls to effectively manage project related public sector responsibilities.

Initiatives to monitor and control the next phases of the project includes the following.

Design Development/Construction and Commissioning

A highly collaborative design development process has been established, with AHA architects, constructors and facilities management service providers working with AHCC project and health authority user groups to complete the detailed facility design, including aspects such as room layouts, finishes, equipment selection and positioning, circulation and way-finding. Should any changes be requested that fall outside the scope agreed to in the project agreement, they will be subject to a scope control procedure and approvals process.

AHCC Inc will formally review the design at agreed milestones, and will confirm that the design meets clinical functionality requirements before the facility is built.

During construction, AHCC Inc will have access to the site and to documents, drawings and specifications. In addition, an independent certifier has been appointed to monitor construction and confirm that the hospital and cancer centre meets substantial completion requirements.

AHCC Inc will receive monthly inspection and progress reports from AHA, and will be able to address any issues that arise at a joint project management oversight committee that meets at least once per month. AHCC and AHA have agreed to a master schedule for design and construction and will work together to identify and resolve any issues that may put this at risk.

Start-Up, Relocation and Health Authority Commissioning

Partnerships BC is working with the health authorities to plan for the clinical start-up activities required for a new health facility. These include clinical services redesign (for example, training health professionals in the use of new IT devices and equipment), clinical commissioning (such as the calibration of radiotherapy equipment), relocation from the MSA Hospital, and organization of health authority policies and procedures for administering the project agreement during operations.

These activities would be required regardless of whether a traditional or public private partnership procurement model had been used for the project. They are related to, but not part of, the project agreement and do not involve AHA. Typically, moving into a new health facility costs in the region of half a year's operating costs. Preliminary estimates of the cost of start-up activities are approximately $46 million.

Operations

After commissioning, the health authorities will take ownership of AHCC Inc and will be responsible for administering the project agreement. Resources (three full time health authority employees) have been identified in the health authorities' operating estimates to perform these functions. The specific administrative structure and procedures have yet to be finalized, but key functions will be to ensure that AHA is meeting performance standards through the implementation of a contractually required performance monitoring program (which will include quality satisfaction surveys of patients, visitors, health authority staff and medical staff).

Long Term Contract Review

Partnerships BC will work with MHS and the health authorities to design a process for reviewing the project at appropriate intervals such as five, 10 or 15 years from the start of operations. This review process will enable Partnerships BC to establish whether the project agreement is functioning as intended, and whether the expected benefits have been realized.

8. Best Practices

Partnerships BC has determined some best practices for public private partnerships through the AHCC project

The AHCC is the first major B.C. hospital to be procured through a public private partnership model. As such, it has provided an important opportunity to build on experience and develop best practices for future projects. As discussed below, best practices have been identified at each stage of project development.

Preparing the business case

Clarity around the project vision, success criteria and cost estimates are essential.

- The AHCC business case was underpinned by a vision and guiding principles. This proved critical in defining success criteria, informing decisions and providing a foundation for the evaluation process.
- Clearly defined contractual outcomes (in particular output specifications that are at least 80 per cent complete) are important for the creation of reliable capital and operating cost estimates.
- The public private partnership budgeting process created a clear understanding of all project-related cost elements, particularly with respect to risk and lifecycle cost elements such as ongoing maintenance. Traditional capital budgeting tends to be less specific, applying broad contingency figures for risk and rarely identifying lifecycle costs.

Approaching and developing the market

The emerging Canadian partnership market is being developed and nurtured to maximize competition.

- The number of participants in the North America partnership market is currently relatively small. Partnerships BC marketed the AHCC project globally prior to starting the competitive process, so as to maximize competition by encouraging companies with the required experience, expertise and capacity to participate.
- Ongoing market sounding proved to be an important tool for ensuring a clear understanding of the level of interest in aspects of the project.
- When designing the competitive process, in order to attract and maintain interest in the project it is important to consider pursuit costs for potential proponents. These costs are driven by the number of stages in the process, the level of detail required in proposals, and the availability of partial compensation for unsuccessful proponents.
- Through the AHCC and other projects, Partnerships BC has developed a thorough understanding of international and Canadian developers, sub-contractors, lenders and advisors and is working with this community to further develop the B.C. market (and by extension the Canadian market). The broader and more experienced the B.C. and Canadian markets become, the greater the participation and competition on future B.C. projects will be.

Structuring the proposed agreement

The project agreement between AHCC Inc and AHA will form a benchmark for the development of future partnership projects.

- The Canadian market has accepted the project's contractual structure and the payment mechanism, and these will be utilized as the basis of future partnership agreements.
- In moving to an output and outcome based contract, Partnerships BC has identified a number of factors that contribute to sound contract development practices:
  - extensive input by the eventual hospital and cancer centre users is required throughout the project development process. In the case of AHCC, the Fraser Health Authority and Provincial Health Services Authority made the project a priority and provided significant support;
  - the template for output specifications, together with instructions on wording, should be developed by the project's legal adviser (this mitigates the risk of forming unintended obligations, and assists in harmonizing specification and contract language); and
  - the market will price a "premium" for any particular service provision that is not well defined or understood. For example, biomedical engineering and health records transcription fell into this category, and ultimately were not included in the final agreement so as to avoid such a premium. These services will be provided by the health authorities, as is currently the case.

Designing the procurement process

Good planning, organization and clarity will contribute to a successful procurement process.

- The concurrent release of the draft project agreement and the RFP gave proponents clear information on project requirements – such as the proposed risk allocation, evaluation criteria and submission requirements.
- The essential amendment process for identifying potential "deal breakers" significantly reduced the length of negotiations. In future, with a precedent agreement available, the essential amendment phase may not be required.
- Partnerships BC developed a well-organized process for providing information and clarification to proponents during the proposal development process that should be applicable for future projects.
- As on the AHCC project, evaluation teams should actively engage key project stakeholder groups, and be organized and well briefed prior to the commencement of evaluation activities.
- It is critical that lenders have a strong involvement early in the process. In the AHCC project, early lender involvement resulted in financial close seven months following the designation of the preferred proponent; in the UK, similar projects without strong lender input have taken as long as 18 months to reach financial close.

Increasing standardization

Standardization of documentation and processes is fundamental to increasing the efficiency of the partnership procurement process in B.C.

- Market participants have encouraged Partnerships BC to standardize project agreements, procurement documentation and procurement processes where appropriate.
- The AHCC project involved legal and international transaction advisers in structuring the project, developing procurement documents and managing negotiations. As the advisory community gains experience with B.C. precedent documentation and identified best practices, the process of standardization will accelerate. The form of project agreement used for the AHCC has already been applied to another B.C. public private partnership project, the Britannia Mine Water Treatment Plant project.

Implementing governance and project management

An effective and efficient governance model requires the project team to make decisions in an organized way; allows for reflection and the use of second opinions; and enables the project team to focus on external issues.

- Partnership projects typically involve several public sector stakeholders, which necessitates an accountable, organized and consultative governance structure. The governance model for the AHCC project was developed and streamlined as the project developed and requirements changed; the resulting use of an overall project board (AHCC Inc) as a single point of decision making and contracting was very effective and this structure could have applicability for other projects, particularly those involving a number of government stakeholders.
- Partnerships BC found that stakeholder consultation was most effective when it focused on principles, rather than specific drafting issues.
- U.K. experience has highlighted the need to apply appropriate resources to project management after financial close, to ensure that all contractual commitments are effectively implemented. Partnerships BC has implemented a project management structure and controls for the AHCC project to maintain health authority and technical adviser input in the process; mitigate those risks retained by the public sector; oversee the performance of the private sector; and thoroughly and effectively implement the project agreement.

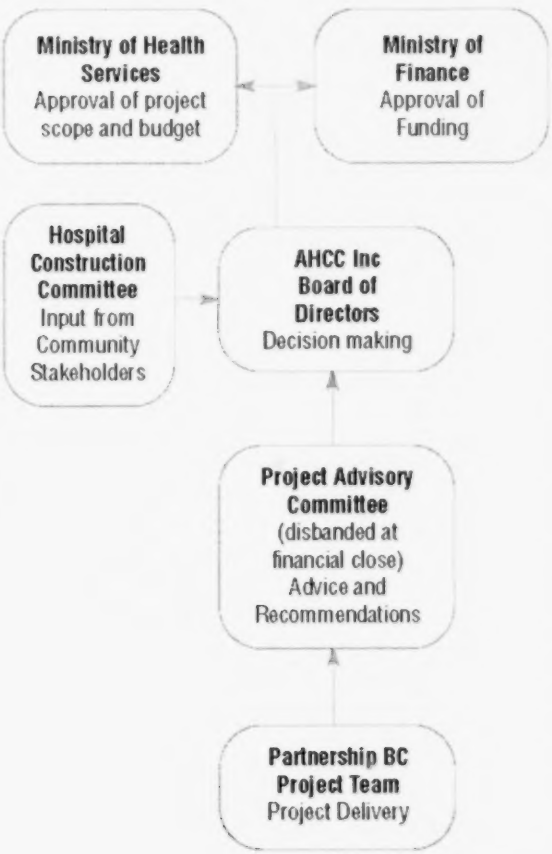
Artist's rendering of the interior atrium

Appendix A:
Developing and Structuring the Partnership Approach

Project Governance

Partnerships BC is managing procurement of the AHCC project as an agent for the Ministry of Health Services (MHS) and the Province. Partnerships BC has worked with MHS, the Fraser Health Authority (FHA) and the Provincial Health Services Authority (PHSA) to develop a consultative governance model, illustrated in the chart below. This model will be used through to facility commissioning.

AHCC Project Governance Structure



Abbotsford Hospital and Cancer Centre Inc (AHCC Inc) was established under the *Company Act* as a formal decision making and contractual vehicle for purposes of the partnership. The original board comprised three directors representing MHS and Partnerships BC.

Following the release of the Request for Proposals in September 2003, health authority representatives attended board meetings as observers. After the financial close of the project agreement, they joined as directors, while representatives of the Fraser Valley Regional Hospital District (RHD), which is making a significant capital contribution to the project, attend board meetings in an observer capacity.

Following construction, all shares of AHCC Inc will be transferred from Partnerships BC to the FHA and PHSA for the operations phase of the project.

The Project Advisory Committee was established to oversee the project's development and progress and to ensure that clinical and service needs were taken into account. Committee members included representatives of MHS, FHA, the PHSA and the RHD. This committee had a significant role in shaping the project and supported the development of detailed consultation processes for specific aspects of project procurement to provide an effective interface with the health authorities. The committee discontinued meeting after August 2004.

A Hospital Construction Committee has been in place since May 2003. Members are local MLAs and representatives of the RHD. The committee provides a valuable channel of communication with the community, providing updates on project progress and keeping the project team advised of local issues and concerns affecting project decision making.

The Project Team includes a chief project officer, a project financial officer and project leaders responsible for commercial, procurement and technical services. Key team members were seconded to Partnerships BC from FHA, bringing with them knowledge of previous planning processes and health authority facility requirements. Health authority representatives also work closely with the project team and advise on clinical and facility management related issues. During the project structuring, competitive selection and negotiations, the project team included personnel with international transaction and legal expertise.

The project team has used a range of classic project management techniques such as scheduling and scope control, following the strategy outlined in the project procurement plan covering the period to financial close. That plan is being succeeded by a project management plan to completion of construction and commissioning, which focuses on how the public sector will implement its part of the project agreement.

Project Structure and Design

Partnerships BC has searched for and utilized best practices in structuring the project

Best practices can be defined as the set of processes, techniques or management methods having either a demonstrable record of success or representing the approach most likely to achieve significant improvements in terms of cost, quality, schedule or other specified criteria.

Since public private partnership procurement is still relatively new in B.C., Partnerships BC learned from the considerable experience of other jurisdictions such as the U.K. and Australia. Partnerships BC has drawn on this experience and assimilated best practices into the structure of the AHCC project, paying particular attention to the successes and lessons learned during the development of the U.K. Private Finance Initiative model. This is the most developed partnership model in the world in terms of delivering health infrastructure and non-clinical support services.

Partnerships BC adapted the UK partnership model for BC conditions

The U.K. model for partnership delivery was adopted as a general baseline with adaptations for B.C. and Canadian circumstances. It is based on a standard form of project agreement – an output-based contract, rather than the prescriptive arrangement typically seen in traditional procurement projects – along with a performance-based payment mechanism. Several aspects of the U.K. model were modified for use in B.C.

Under most U.K. public private partnerships, the private party owns the facility until the end of the contract term. Partnerships BC modified this approach to increase protection of the public interest, using instead a licence structure that kept facility ownership in public sector hands and provided superior tax efficiency, simplicity and flexibility. The licence gives the private partner rights, such as access to the site, to perform its obligations. The U.K. is increasingly shifting to this contractual model in its agreements.

Comprehensive output specifications define the private party's deliverables in the project agreement. Developing these was a major focus for the project team in close consultation with health authority representatives and project advisors. The output specifications were developed as follows:

- Clinical/non-clinical: Output specifications describe the clinical (e.g. emergency and ambulatory) and non-clinical (e.g. information management and learning centre) programs that will take place in the facility, along with information such as required adjacencies and room sizes. These specifications are the basis upon which the private partner designs the facility. The U.K. model for specification development was adapted to reflect the AHCC facility program and Canadian health care practices and requirements.
- Design and Technical: Output specifications were developed specifically for the project, taking into account Canadian standards, building codes and other codes required in B.C.

- Facilities Management: The starting point for the facilities management output specifications was the U.K. standard model, which was then modified to reflect Canadian terminology and B.C. hospital operation practices. These specifications define the requirements and performance standards for each service. For example, the private partner is required to provide laundry and linen services 24 hours per day, 365 days per year, and, among other requirements, there must be sufficient clean linens and uniforms at all times. A quality monitoring system will be developed to identify whether performance indicators are met.

Following a review of alternative service delivery options, a list of facilities management services was recommended for consideration as part of the procurement package. This package was reviewed and amended over time to arrive at the final facilities management services package. For further detail, see Chapter 4: Changes in the Project.

Equipment represents about one third of the capital element of the project. The initial equipment strategy was to transfer as much risk as possible to the private partner where cost effective, maximizing clinical input by choosing specific equipment items as late as possible to provide a balance between changing technology and construction/installation risks, and to maximize the use of existing procurement contracts where they represent best value. The equipment strategy was modified over time to reflect market response (for more details see page 22).

Risk analysis is required in all capital projects, but is much more significant in a partnership project where risks must be categorized, valued and considered in light of whether they would be more appropriately managed by the public or private sector. The project team developed an extensive risk matrix, which was reviewed and endorsed by the project's transaction advisors and formed the basis of the valuation of risk, and the initial allocation presented in the project agreement.

The payment mechanism is critical for effective delivery of the project agreement. It defines much of the risk transfer and establishes incentives for the private partner to offer continuous services to agreed-upon performance standards. The standard U.K. payment mechanism model was used as a starting point, with the following modifications:

- the mechanism was simplified to improve ease of administration;
- provisions were made for surveys to ensure that user satisfaction is reflected; and
- a bonus system was included to encourage consistently good service, and to help foster a positive working partnership.

Development of the Public Sector Comparator (PSC) as a benchmark

Under the partnership model, the private sector partner will finance, design, build, equip, maintain and provide facility management services for the AHCC for a total annual service payment commencing after construction. The PSC represents a hypothetical, risk adjusted estimate of public sector costs to procure the same scope of work though a traditional model, and serves as a benchmark for assessing the value for money potential of different options.

The AHCC PSC was modified as project plans evolved, and was approved as a benchmark by the AHCC Inc board prior to the receipt of AHA's proposal. As new information was received, assumptions in the model were changed to reflect actual conditions. Changes to the PSC were reviewed and approved by the AHCC Inc board, documented, and reviewed and reconciled by Ernst and Young.

Procurement Strategy and Process Design

A four-stage procurement process - Request for Expressions of Interest; Request for Proposals (RFP); Contract Finalization and Close; and Project Development - was designed with extensive input from the project's legal counsel and process monitor with the aim of achieving a competitive, rigorous, fair and transparent process.

Partnerships BC incorporated steps to make the process productive and efficient

These steps included:

- concurrent release of the RFP and a draft form of project agreement;
- a process to identify and, if possible, resolve potential deal breakers early;
- provision of partial payment to offset some pursuit costs for unsuccessful proponents, and in consideration for the right to use aspects of unsuccessful proposals;
- a well organized and managed bilateral and information process to assist proponents in developing their proposals; and
- guidance to proponents on an affordability threshold for the project.

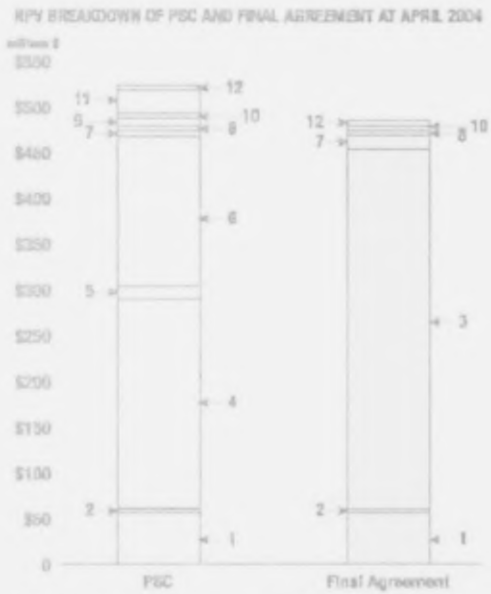
The process was also supported by ongoing consultation with stakeholders (including MHS, health authorities, the RHD and government agencies) and third parties.

Advisors from Partnerships UK, Bevan Brittan (U.K.), Clayton Utz (Australia) and Infrastructure Procurement Partners (Australia) provided advice on the RFP and the draft project agreement to ensure consistency with best practices worldwide. CIBC World Markets reviewed the draft project agreement and confirmed prior to its release with the RFP that the proposed terms and conditions represented a feasible basis on which to approach proponents. The project's financial model, PSC and risk matrix were all reviewed by Ernst & Young, who confirmed the reasonableness of the assumptions and calculations either by independent verification of model outcomes or by comparison of outcomes with similar projects.

Artist's rendering of the building exterior

Appendix B:
Comparison of the Net Present Value (NPV) of the Public Sector Comparator with the Final Agreement

The bar charts below compare the make-up of the public sector comparator (PSC) relative to the final project agreement with Access Health Abbotsford.



1. RHD Contribution
2. FHA Equipment Contribution
3. Total Annual Service Payments
4. Capital Costs
5. Repair and Replacement Elements
6. Operating Costs
7. Public Sector Project Management Costs
8. Retained Development Risk
9. Transferable Development Risk
10. Retained Operating Risk
11. Transferable Operating Risk
12. GST

Explanatory Notes

- The annual service payments that will be paid to AHA can be compared with the capital costs, facility management operating costs, repair and replacement costs and transferable risk costs in the PSC.
- The NPV charts refer to four categories of risk:
  - Transferable Operating Risk. Events that might occur during the operating period (following commissioning) for which responsibility and consequence could reasonably be transferred to the private sector in a public private partnership arrangement.
  - Retained Operating Risk. Events that might occur during the operating period for which responsibility and consequence likely would not be transferred to the private sector in a public private partnership arrangement.
  - Transferable Development Risk. Events that might occur during the development period for which responsibility and consequence could reasonably be transferred to the private sector in a public private partnership arrangement.
  - Retained Development Risk. Events that might occur during the development period for which responsibility and consequence likely would not be transferred to the private sector in a public private partnership arrangement.

- Public sector management costs reflect estimated costs through to commissioning.
  - Total public sector management costs for the project, up to the time when the hospital begins operation, are projected to be $24.5 million. Of that, $19 million ($16 million present value) was included in the public private partnership NPV. This figure reflects the project's expected procurement costs excluding a portion of costs expected to provide benefits to future projects (including one-time costs related to international advisers, legal costs and tax advice). The procurement costs include the establishment of a dedicated project team and the cost of performing extensive due diligence around the hospital and cancer centre program and the development of detailed output specifications.
  - The PSC analysis assumes procurement costs for a traditionally procured project of the same scope as the final agreement would be approximately $8 million present value. Normally this type of project would be run by a health authority rather than a dedicated project team. The PSC procurement cost figure includes direct costs such as salaries, legal fees and work related to clinical best practices, but assumes lower overheads, as well as substantially lower costs relating to the development of the clinical program, the development of output specifications and related contractual documents and the competitive process.
- The Fraser Health Authority is making a contribution towards equipment in the new hospital. Normally equipment in an existing hospital would be transferred to a new hospital. This is not the case in this project, and instead the FHA is making a contribution of $4 million towards equipment.
- The present value of costs funded by the capital contribution made by the Fraser Valley Regional Hospital District (RHD) has been included in the graph for completeness ($71 million, or $61 million present value). These costs are provincial commitments under the final agreement, but since they are funded by the contribution they are not generally included in the discussion elsewhere in the document of the net present value cost of the PSC and final agreement to the province. The economic analysis of the PSC and the final agreement are affected in the same way by this accounting for the contribution and so the comparison of the PSC to the final agreement is unaffected by this treatment.

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